



GUIDANCE ON CASE CLOSURE AND THE REQUIREMENTS FOR INSTITUTIONAL CONTROLS AND VPLE ENVIRONMENTAL INSURANCE

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PURPOSE AND BACKGROUND

The purpose of this guidance is to discuss:

1. Required and discretionary application of deed restrictions and deed notices as a condition of closure of a hazardous substance contamination case under ch. NR 726 or chs. NR 746 and NR 726, Wis. Adm. Code.
2. The Remediation and Redevelopment Program's Geographic Information System (GIS) Registry of Closed Remediation Sites, for sites closed with residual soil and/or groundwater contamination.
3. Environmental liability insurance requirements for sites eligible for the Voluntary Party Liability Exemption (VPLE).

This guidance does not apply to deed affidavits recorded pursuant to s. NR 728.11, Wis. Adm. Code (which are for sites where an RP is not proceeding with adequate investigation or remedial action, but that are considered to be low priority for purposes of enforcement).

This guidance document is intended for use by Department of Natural Resources (DNR) and other state agency staff, and responsible parties (RPs), consultants or other interested parties. It may be used along with published references and guidance documents, information from training courses and current professional journals. The attached model deed documents are in a format acceptable to County Register of Deeds offices. The material presented is based on available information and the knowledge and experience of the authors and the peer reviewers. The reader is referred to the DNR's Remediation and Redevelopment Program NR 700 rule series, along with supporting Brownfield redevelopment and technical guidances on soil and groundwater contamination site investigation, remediation and case closure.

NOTE ON TERMS USED IN THIS GUIDANCE: A specific hazardous substance discharge incident is referred to as a spill "case" or hazardous substance discharge "case." A hazardous substance discharge "site" is the area where the source of contamination is found and all areas where the contamination has migrated. A single "site" may include several properties. However, it is also possible to have more than one hazardous substance discharge "site" on a single property if there has been more than one hazardous substance discharge incident on a property.

DISCLAIMER

This document is intended solely as guidance, and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations, and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

This guidance is based on requirements found in ch. NR 140 and the NR 700 rule series, Wis. Adm. Code; the Hazardous Substance Spill Law, s. 292.11, Wis. Stats.; the Voluntary Party Liability Exemption statute, s. 292.15, Wis. Stats.; the Environmental

Repair Statute, s. 292.31, Wis. Stats.; and the Groundwater Law, ss. 160.23 and 160.25, Wis. Stats.

OTHER RELEVANT DOCUMENTS

This guidance may be more complete when used in conjunction with the following documents prepared by the Remediation and Redevelopment program staff. These documents are found at: http://dnr.wi.gov/org/aw/rr/archives/pub_index.html (use the publications browser option on the left of screen to find by number)

1. GIS procedural and public information documents found at:
<http://maps.dnr.state.wi.us/brrts> (click the "about" button at top)
2. "The WI DNR Case Summary and Close Out Form", RR-4400-202.
3. "Understanding Wisconsin Standards for Cleanup of Contaminated Soil, An Overview of Wisconsin Administrative Code Chapter NR 700," RR-520-97.
4. "Interim Guidance on Soil Cleanup Levels for Polycyclic Aromatic Hydrocarbons (PAHs)," RR-519-97.
5. "Interim Guidance on Use of Leaching Tests for Unsaturated Contaminated Soils to Determine Groundwater Contamination Potential," RR-523-97.
6. "Interim Guidance on Soil Performance Standards," RR-528-97.
7. "Interim Guidance on Natural Attenuation for Petroleum Releases," Publication, RR-614.
8. "Commonly Asked Questions about Lead (Pb) Soil Standards in Wisconsin," RR-653.
9. "Application of Soil Performance Standard Guidance," RR-676.
10. "Determining Residual Contaminant Levels Using The EPA Soil Screening Level Web Site," RR-682.
11. "Checklist of Documents for GIS Registry Packet," RR-688.
12. "Guidance for Electronic Submittals for the GIS Registry of Closed Remediation Sites," RR-690.
13. "Voluntary Party Remediation and Exemption from Liability (Fact Sheet 2)," RR-506.
14. "Insurance for Voluntary Party Liability Exemption Sites Using Natural Attenuation: Information and Fee Schedule," RR-661.
15. "Smear Zone Contamination", RR-712.
16. "Guidance for Cover Systems as Soil Performance Standard Remedies", RR-709.

This list will be expanded as additional guidance documents are developed. These guidance documents may be obtained by sending a request to: Public Information Requests, Bureau for Remediation and Redevelopment, Department of Natural Resources, P.O. Box 7921, Madison, WI 53707.

This guidance will be updated as needed. Comments and concerns may be sent to "Guidance Revisions", Jane Lemcke - RR/3, WDNR, P.O. Box 7921, Madison, WI 53707.

INTRODUCTION

Institutional controls are defined as legal and administrative mechanisms that minimize the

potential for human exposure to contamination by limiting land use or groundwater use, that require or prohibit certain actions by responsible parties or property owners to protect human health or the environment or that give notice of the existence of residual contamination to prospective purchasers and other interested persons in order to meet the intent of the Spill Law, s. 292.11, Wis. Stats. Institutional controls (ICs) are required as a condition of case closure under s. NR 726.05 (8)(b), Wis. Adm. Code, when certain conditions exist at a site and may be required under s. NR 726.05 (8)(c), Wis. Adm. Code, as a discretionary tool when post remediation conditions warrant.

The following are the types of ICs used in the RR program:

1. A **deed restriction** requires action in the future, restricts development or activities at a site, or is used to designate an industrial land use zoning classification that is consistent with the concentrations of residual soil contamination at the site.
2. A **deed notice** is used to document certain conditions at the site at the time that a case is closed, but for which no action is required to be taken unless site conditions change.
3. Listing a site on the Internet accessible **RR Geographic Information System (GIS) Registry Of Closed Remediation Sites** to ensure the public is notified of soil and/or groundwater contamination at the site, which is contained or is being treated by a long-term remedial action. The GIS Registry lists closed remediation cases where residual contamination exists in soil and/or groundwater above standards established by rule. A number of sites on the GIS Registry may also have a deed restriction or notice recorded at the Register of Deeds Office for affected properties.

Institutional controls are not used in place of conducting soil and groundwater remediation at a site. Response action(s) must be taken that ensures that all pathways that contamination may follow are addressed in order to protect human health and the environment. A deed restriction may be used to ensure the long-term effectiveness of the selected remedy (such as an engineered cap) or to ensure that a specified land use doesn't change. Deed instruments may also be useful in limiting human access to a site or human contact with contaminants for the duration of, or after the completion of, the remediation.

The need for institutional controls as a condition of case closure should be considered by responsible parties (RPs) early in the remedial decision-making process for a site, since certain long term remedial options for soil and groundwater may have mandatory deed restriction and/or GIS Registry listing requirements or the requirement to purchase VPLE insurance. By considering the need for ICs early and following procedures for drafting them, it is more likely that the application for case closure for the site will be a complete document when the Department reviews it, resulting in a decision on the application, rather than a letter stating that the application is incomplete.

Section 292.15 (2)(ae) 3m, Wis. Stats., requires the **purchase of environmental insurance** for Voluntary Party Liability Exemption (VPLE) sites where groundwater contamination exceeds NR 140 groundwater enforcement standards and reliance on natural attenuation to restore groundwater quality has been approved by the Department. Voluntary parties may obtain environmental insurance under a master state insurance policy as provided in ch. NR 754, Wis. Adm. Code. The need for environmental insurance as a condition of obtaining a certificate of completion should be considered by the responsible party (RP) and their consultant early on in the remedial decision-making

process for a VPLE site, since closure with groundwater that exceeds NR 140 groundwater enforcement standards will require the purchase of environmental insurance and the listing of the site on the GIS Registry.

For sites that are eligible for closure on the condition that they will be listed on the GIS Registry, GIS Registry information is always required to be submitted with the case closure application. Sections NR 726.05 (2)(a) 2 and (2)(a) 3, and NR 726.05 (3)(a) 4. and (3)(b) 4., Wis. Adm. Code, require the submittal of information for the GIS Registry with the closure request in order for the application to be considered complete and to ensure that the closure committees or staff have the information they need to review the case for closure. See DNR's "Case Summary and Close Out Form" RR 4400-202, which includes the GIS Registry information requirements in section I. RR program staff may provide information to assist the RPs and consultants and/or attorneys in drafting site-specific deed instruments that are required for case closure.

As required in s. NR 726.05 (9), Wis. Adm. Code, all deed instruments must be drafted as an affidavit in the format required by s. 59.43 (2m), Stats., and must include each property's legal description typed onto the form or as an attachment which is incorporated by reference. In counties that use Parcel Identification Numbers (PINs), these also must be included on the deed instrument. The deed restriction must be signed by the property owner or owners, and their signatures must be notarized. A deed notice may be signed by a consultant on behalf of a property owner. The deed instrument should also document the type, concentration and location of residual contamination within the site and for restrictions, a detailed description of actions prohibited or required on the part of the RP or property owner or for notices, the site specific conditions specified by the DNR at the time of case closure.

Deed instruments should reference any attachments such as a map showing the location of a cap. A maintenance plan should be referenced as needed in a deed restriction, by title, date and where a copy of the plan can be found. A summary of actions included in the maintenance plan may also be included in the deed restriction text. All deed instruments should contain a statement on who the enforcement entity is for a site. This could be DNR, the Department of Agriculture, Trade and Consumer Protection, the Department of Commerce, a local unit of government, or another party approved by the agency with authority for the site. The enforcement authority should periodically inspect the property after the case is closed to ensure compliance with the deed instrument. If, in the future, a threat to human health or the environment exists as a result of noncompliance with the deed instrument, the enforcement authority may take enforcement action to address the threat posed by the noncompliance.

<p>NOTE: All deed restrictions and deed notices must be reviewed as a draft document by DNR staff before they are finalized, signed and recorded at the County Register of Deeds Office. This will ensure that the document meets all applicable requirements.</p>

It is helpful to RR closure committees and closure staff if draft deed documents are submitted to them as part of the case closure request package. In the absence of draft documents in closure request packages, extra time will be required to obtain approval from the Department for draft deed instruments before they can be recorded to satisfy the requirements of a closure decision. The conditions that must be met in order for a final closure decision to be made are described in either a denial letter, if a deed restriction is

required or a GIS Registry fee or packet is missing, or in a conditional closure letter, which is sent to the RP and their consultant. Conditions may include the requirement to abandon monitoring wells, disposing of treated soils, etc. When all conditions specified in the denial letter or conditional letter are met, a final closure letter will be written for the case.

NOTE: For all cases, the final case closure letter should briefly describe the location, type and concentration of residual contamination at the site. The letter should also document any site specific information that may be pertinent to the current or future property owners including the existence of a performance standard or engineered cap and maintenance plan, the type of ICs that are required and the media impacted (ie. GIS Registry for residual soil contamination that exceeds standards or the SSRCL for benzene).

DNR will track sites with deed instruments on the Bureau for Remediation and Redevelopment Tracking System (BRRTS). An abbreviated version of BRRTS, known as BRRTS on the Web, is available on the DNR's web site which serves as a tool to provide public information about contamination sites where remedial actions are being conducted or have been closed. BRRTS and BRRTS on the Web are useful for providing information about the types of contaminants found at a site and whether soils and groundwater have been impacted. BRRTS uses numerical codes to indicate the status of a case (eg., site is in the process of completing a site investigation or is conditionally closed or has received a final closure decision, etc.). BRRTS codes specify conditions that a site that is still "open" must meet in order for it to receive final closure by RR closure staff or closure committees.

The following codes are used in BRRTS to indicate the classification and status of sites that are actively in the remediation process and conditions that were met for a site that was closed. Sites that follow the simple site process in s. NR 700.11 (1) and are closed under the simple site closure requirements of s. NR 726.07 Wis. Adm. Code are also coded in BRRTS, although simple sites are not formally reviewed nor is a closure letter written.

BRRTS Codes

<u>Action:</u>	<u>Code</u>
Activity closed with site-specific conditions/detailed closure letter	86
Deed Restriction	52
Deed Notice	51
Soil performance standards	55
GIS Registry Closure	50
GW use restrictions	formerly 50
PAL exemptions.	48
NR 720.19 SSRCL or soil performance standard	55

It is important to note that institutional controls are not made unnecessary by local government controls such as zoning ordinances and land use plans. Zoning ordinances and local government land use plans can be changed and are not a substitute for the ICs described in this document.

Appendix 1 provides examples of case closure situations where deed instruments are required by rule or may be required as a condition of closure as a discretionary decision.

Appendix 1 also provides examples of when and how a site gets listed on the GIS Registry with or without a deed instrument.

TYPES OF CASE CLOSURE DECISIONS

The following describes the types of cases in the RR Program that may be closed and the closure conditions that DNR RR closure committees or staff, and the staff of other state agencies with administrative authority for a site, must require or are given the discretion to require. A complete closure application includes a Case Summary and Close Out Form (DNR Form 4400-202) as required by s. NR 726.05 (2)(a) 1, Wis. Adm. Code, and all tables, cross-sections, maps, analytical information and affected property notices meeting requirements of ss. NR 726.05(2)(a) 2. and (2)(a) 3., and NR 726.05 (3)(a) 4. and (3)(b) 4., Wis. Adm. Code (and listed in the form). The completed form will ensure adequate documentation is included in order for staff to make a decision regarding application of ICs at the time that a case is reviewed for closure.

1. UNRESTRICTED CLOSURE

When the site meets the requirements of ch. NR 140 (groundwater quality standards), chs. NR 700 to NR 724, ch. NR 746 if applicable, and the criteria for applying for case closure under ch. NR 726, the case may be closed and no institutional control is needed. When a fee under ch. NR 749 is submitted to DNR for closure review and documentation, a closure letter that highlights the remedial response actions taken at the site and states that the site meets the requirements of ch. NR 726 is sent to the responsible party. If a fee is not submitted, a case closure letter will not be issued by DNR staff.

2. CLOSURE WITH REQUIREMENT TO LIST A SITE ON THE GIS REGISTRY OF CLOSED REMEDIATION SITES.

Depending on the remedy selected for contaminated soils or groundwater, there may be a requirement to list the site on the GIS Registry at the time that the case is closed out. Sections NR 726.05 (2)(a) 2 and (2)(a) 3, and NR 726.05 (3)(a) 4 and (b) 4., Wis. Adm. Code, specify the GIS Registry information that must be provided with the closure request for each property within the site. The following describes the types of sites that are listed with soil contamination or groundwater contamination, as well as sites that have both soil and groundwater contamination. Rule requirements that distinguish closure for sites with petroleum contamination are also discussed.

a. Sites with Residual Soil Contamination, But No Residual Groundwater Contamination:

Cases where final soil sampling reveals some residual soil contaminant concentrations that exceed generic or site specific residual contaminant levels (SSRCLs) as determined under s. NR 720.09, s. NR 720.11 and s. NR 720.19 may be closed **if**: (1) soil contamination has been adequately characterized for all pathways of concern and, (2) there is no threat to human health or the environment and, (3) the site will be listed on the GIS Registry as required by s. NR 726.05 (2)(a) 3. (intro.), Wis. Adm. Code and (4) remediation has been completed to the extent technically and economically feasible per s. NR

722.07 (3) b. or s. NR 722.07 (4), Wis. Adm. Code (except that the last two requirements do not apply to petroleum cases that qualify for closure under ch. NR 746). If a site is required to be listed on the GIS Registry, all public street or highway rights-of-way and railroad rights-of-way that fall within the contaminated site boundaries must be identified for inclusion on the GIS Registry. The site is listed on the GIS Registry in order to notify the public of post-remediation soil contamination. This may be all that is required for the site in many cases. See the examples in Appendix 1 of this guide.

A deed instrument may be required in addition to the GIS Registry listing, when an additional response action will be, or is likely to be, required in the future. Section NR 726.05 (8), Wis. Adm. Code, lists conditions under which a deed instrument is required or may be required at the time that a case is reviewed for case closure (section #3 below). For example, s. NR 726.05 (8)(b) 2 requires that a deed restriction be filed for a site if a structural impediment exists which currently prevents access to significant soil contamination that is likely to require investigation and remediation after the impediment is removed. In this case, listing the site on the GIS Registry along with a deed restriction, noting investigation and remediation requirements when soils are accessible, is required as part of the closure decision.

b. Petroleum Cases with Soil Contamination Only: Cases with only soil contamination that meet the risk screening criteria (no risk factors exist) under ch. NR 746.06, Wis. Adm. Code, are not required to be listed on the GIS Registry, due to the exemption in s. NR 720.02(1m), Wis. Adm. Code. This includes cases that can be closed under s. NR 746.07, Wis. Adm. Code, following completion of a site investigation where the risk criteria of s. NR 746.06 (2) Wis. Adm. Code are met (determined not to exist at a site) or cases that can be closed under s. NR 746.08 Wis. Adm. Code, following remedial action to address 1 or more s. NR 746.06 (2) Wis. Adm. Code, risk criteria. Petroleum cases that are eligible for closure under ch. NR 746 are exempt from the requirements of ch. NR 722, Wis. Adm. Code regarding evaluation and selection of remedial actions, under s. NR 722.02(3m), Wis. Adm. Code. However, RPs for sites that are eligible for closure under s. NR 746.07 or NR 746.08, Wis. Adm. Code, may be required to file a deed restriction or deed notice if the agency with administrative authority over the site determines that a threat to human health or the environment could exist at some point in the future in the absence of a deed instrument.

It should be noted that contamination that exceeds NR 746 Table 1 soil screening levels in the "smear zone" would eliminate the option of closing a case under NR 746, Wis. Adm. Code. (This is also true if the "smear zone" is within 4 feet of the ground surface and contamination in the "smear zone" exceeds NR 746 Table 2 direct contact concentrations.) The "smear zone" is the area where fluctuating water table levels have "smeared" contamination in the soil column. There must be at least a 5-ft. separation between soil contamination and groundwater for a case to be closed under ch. NR 746, Wis. Adm. Code.

Sites that are contaminated with petroleum products discharged from petroleum storage tanks, that are not eligible for closure under ch. NR 746, but do qualify

for closure under ch. NR 726, Wis. Adm. Code, are required to be listed on the GIS Registry if soil contaminant levels exceed NR 720 table values or SSRCLs calculated under ss. NR 720.09, NR 720.11 or NR 720.19, Wis. Adm. Code. All applicable information required by ss NR 726.05 (1) [regarding site compliance], NR 726.05 (2)(a) 1, 3, 4 and 5 [regarding requirements for closure requests], NR 726.05 (2)(am) 2 [regarding collection of fees by other agencies with administrative authority], and NR 726.05 (3)(b), Wis. Adm. Code [regarding GIS Registry information required in the closure submittal for eligible sites with residual soil contamination], must be provided at the time that a case closure request is submitted for these sites. A deed restriction will also be required if the case falls into any of the categories listed in s. NR 726.05 (8)(b), Wis. Adm. Code.

c. Sites with Groundwater Contamination: Sites with exceedances of ch. NR 140, Wis. Adm. Code, enforcement standards (ESs) in groundwater may be closed if: (1) the site is listed on the GIS Registry as required by s. NR 726.05 (2)(a) 2 (intro.), (2) the plume is stable or receding, (3) there is no threat to human health or the environment, (4) it has been demonstrated that natural attenuation is effective in reducing contaminant mass and concentration in groundwater, and (5) ch. NR 140 groundwater standards will be met within a reasonable period of time (except that these last two requirements do not apply to petroleum cases that qualify for closure under ch. NR 746). Criteria to demonstrate NA is effective can be found in DNR guidances listed at the front of this guidance. To determine if compliance will be achieved within a reasonable period of time, the RP must assess the criteria in s. NR 722.07 (4)(a) 4, Wis. Adm. Code.

The RP must submit documentation to show that the criteria in s. NR 726.05, Wis. Adm. Code, have been met for the site. This includes providing copies of the written notification to affected property owners where ch. NR 140 ES exceedances exist within the site and allowing 30 days for affected landowners to comment on the proposed case close-out, as provided in s. NR 726.05 (2)(b) 4, Wis. Adm. Code. It also includes providing written notification per s. NR 726.05(2)(a)4, Wis. Adm. Code, for residual contamination in rights-of-way, before a decision is made (see f. below).

d. Petroleum Cases with Groundwater Contamination: Sites with petroleum contamination in groundwater may be closed under ch. NR 746 if: (1) the site is listed on the GIS Registry and complies with any other applicable requirements in ch. NR 726, (2) the risk criteria of s. NR 746.06 (2) are met and, (3) the requirements of ss. NR 746.07 (2) (groundwater contamination within low permeability material) or (4) (groundwater contamination greater than NR 140 ES within permeable material) or NR 746.08 (2) (groundwater contamination within low permeability material) or (4) (groundwater contamination greater than NR 140 ES within permeable material), Wis. Adm. Code, are met.

e. Use of Inferred Data: For all sites where NR 140 ES exceedances exist in groundwater within a site both on an upgradient property which is the source, and a downgradient property which is the leading edge of the plume, but where there are one or more properties in between, the RP may infer from groundwater

monitoring results from the upgradient and downgradient properties, that the properties between also have NR 140 ES exceedances and, therefore, must be listed on the GIS Registry. This is not the case when groundwater samples have only been collected on the source property, and is not applicable when an NR 140. 28 PAL exemption is sought, where monitoring data must be used to demonstrate that a specific property is eligible for an exemption.

f. Right of Way Notification: For all public streets and highway rights-of-way that fall within the contaminated site, that have soil or groundwater contamination that exceeds the standards in NR 720 or NR 140 specified above, written notification of the contamination must be provided to the clerk of the town and county, or village or city where the right-of-way is located and the municipal department or state agency that is responsible for maintaining the public street or highway as required by s. NR 726.05 (2)(a) 4 or (b) 4, Wis. Adm. Code. For railroad rights-of-way that are impacted at these levels, the same notification must be provided to the railroad that maintains the railroad right-of-way. At the time that notification is provided, the RP and the entity **may** want to discuss under what conditions future access will be provided and who will pay for additional investigation or remediation if required in the future. Proof of this notice is to be included with the case closure form as part of the GIS packet.

For all types of groundwater contamination cases that have ch. NR 140 exceedances under public right of ways, the right of ways are not listed as separate properties on the GIS Registry maps. However, public street and highway rights-of-way, or railroad rights-of-way are identified and associated with the source property on the GIS Registry.

g. Modification to, or Delisting from, the GIS Registry: For closed sites that are put on the GIS Registry, the RP may apply to DNR for modifications to, or delisting of a property, or a site, from the GIS Registry after groundwater concentrations fall below ch. NR 140 enforcement standards and/or soil contaminant concentrations fall below ch. NR 720 soil cleanup standards. Property owners may also submit a request to DNR to have their property removed from the GIS Registry if the property is subdivided, or if contaminant concentrations fall below applicable standards. DNR may issue a determination that the site or a specific property no longer meets the criteria for listing on the RR GIS Registry and may remove the site or property listing. Where groundwater concentrations fall between the ch. NR 140 PAL and ES, the RP may apply for an NR 140 PAL exemption from RR closure committees or staff under s. NR 140.28, Wis. Adm. Code, and the site may be removed from the GIS Registry if the PAL exemption is granted.

Fees and type of review for the removal of a site or property from the GIS Registry will vary, depending on the situation. If a property owner wants to divide a property, and remove a portion from the GIS Registry, DNR can issue a general liability clarification letter for the portion of the property that has not been affected by a discharge. The fee for this review is \$500. Enough information must be submitted to DNR to properly assess the parcel to be removed from the GIS Registry. The owner also needs to submit new deed information showing the legal description of the subdivided property. After the information has been

submitted and approved, DNR will update the information on the GIS Registry regarding the subdivided portion of the property.

If an RP (or property owner) wants a site removed from the GIS Registry, they must provide data that show that groundwater contamination is now below enforcement standards, soil contamination has been treated or removed, or both.

If an RP in this situation wants to have the site removed from the GIS Registry, he or she should submit the monitoring data along with a \$750 case closure fee. DNR will review the submitted data, and if approved, DNR will remove the site from the GIS Registry. For a site removal request, DNR will remove all previously affected neighboring properties from the GIS Registry if sufficient data have been received.

A similar procedure applies to an affected neighboring property owner who wishes to have their property removed from the GIS Registry before contamination on the source property reaches standards. If a property is listed on the GIS Registry because it has been affected by contamination from another property, and data are available to show that standards have been met on the affected neighboring property, the owner may submit that data along with a \$500 technical assistance fee. If DNR's review supports the assertion that standards have been met on the neighboring property, the information on the GIS Registry will be updated regarding the removal of that property.

3. CLOSURE WITH DEED RESTRICTION REQUIRED BY RULE

- a) Sections NR 720.11 (1)(c) and NR 726.05 (8)(b) 1, Wis. Adm. Code, apply when an industrial residual contaminant level (RCL) is selected as the cleanup standard for soils at a site. Section NR 720.11 (1)(c), Wis. Adm. Code, requires that a deed restriction be recorded to prohibit non-industrial uses of the property. The term "industrial" is defined in s. NR 700.03 (28m), Wis. Adm. Code. A deed restriction prepared under this rule must specify that the site can not be used for a non-industrial land use unless the DNR approves of further investigation and (if necessary) further remediation to meet non-industrial based soil cleanup standards that will allow a non-industrial use for the site. The submittal of a draft copy of the required deed restriction, which satisfies the requirements of s. NR 720.11 and ss. NR 726.05 (8) and (9), Wis. Adm. Code, must be included with the closure request for sites where the RP intends to use industrial RCLs.

NOTE: To allow an industrial land use classification to be used for soil cleanup standard determinations, all criteria in s. NR 720.11(1), Wis. Adm. Code, must be met. A zoning change must accompany use of this remedial option if the site is located in a zoning district that does not allow industrial land use.

If in the future, a non-industrial land use is planned for the property, DNR (or the agency with administrative authority for the site) must be notified by the RP of the intent to change the land use. Documentation of additional remediation and as applicable, SSRCL calculations should be provided. If contaminant levels are remediated to non-industrial RCLs, DNR or another agency that has administrative authority for the site will issue a written determination that the previously recorded deed restriction is no longer needed. Alternatively, the

restriction may be amended for purposes of reflecting new conditions at the site such as a requirement for maintenance of a new engineered performance standard, etc. To request such a determination from DNR, an RP should contact the Regional RR Team Supervisor, who will then assign the site to a staff person. RR staff will review information on the site to determine appropriate changes to a restriction.

- b) A deed restriction is required where the degree and extent of soil contamination at a site has not been quantified because an area is inaccessible for purposes of investigating or remediating. Sites where structural impediments exist which prevent access to soil that is contaminated which is likely to cause a direct contact or leaching to groundwater threat and require remediation after the impediment is removed are subject to a deed restriction as a condition of closure under s. NR 726.05 (8)(b) 2, Wis. Adm. Code. The deed restriction will require the assessment and remediation or disposal of contaminated soils be completed at such time that soils become accessible.
- c) When a performance standard is engineered and constructed (such as a building or a cap) and serves as the final remedy, a restriction that requires maintenance of the performance standard and the frequency for inspection, with the maintenance plan referenced by title, date and location of where it will be found, must be recorded at the Register of Deeds Office, to ensure that the remedy will remain effective over time, as required by s. NR 726.05(8)(b)3, Wis. Adm. Code. If contamination exceeding applicable direct contact RCLs is within the top 4 feet of soil, and undisturbed soil cover serves as the performance standard under s. NR 720.19(2), Wis. Adm. Code, then a deed restriction is required to ensure the soil cover is not disturbed or excavated in the future. If a s. NR 720.19(2), Wis. Adm. Code, performance standard is selected to prevent contaminant leaching to groundwater, it is recommended that publication RR-709, "Guidance for Cover Systems as Soil Performance Standard Remedies" be consulted.

If there is more than one hazardous substance discharge site on a property, the generic language that is suggested in the Appendix 2 model deed restriction will need to be revised to clarify that the case closure does not apply to contamination from other hazardous substance discharges that are considered separate cases.

NOTE: As required by s. NR 726.05 (8)(b), Wis. Adm. Code, all deed restrictions must be signed and received by the Department within 90 days after conditional closure is granted.

4. DISCRETIONARY USE OF ICs AS CONDITION OF CLOSURE

Discretion is used to determine the need for a deed instrument under s. NR 726.05 (8)(c), Wis. Adm. Code, based on site characteristics at the time of closure and anticipated future conditions. See Appendix 1 for examples of different closure conditions and discretionary decision making.

- a) A deed restriction or notice may be required when contamination remains at deeper than 4 feet at a site (eg., where a SSRCL is calculated based on leaching to groundwater but, due to the depth of contaminated soil, no evaluation of the

potential for a direct contact hazard has been done). DNR staff will need to determine whether a deed restriction to require a future assessment of soil contamination or the removal and disposal of contaminated soils, or a deed notice to simply notify future property owners of the existence of the residual contamination, is appropriate. This decision should be based on the likelihood that exposure to the contamination as a result of a future excavation or other changes in site conditions will result in a direct contact threat.

- b) For sites where there is a lost or improperly abandoned monitoring well that is not accessible at the time that the case closure request is submitted, a deed notice will likely be required as a condition of closure. Such a deed notice should state that s. NR 141.25, Wis. Adm. Code, well abandonment requirements must be met at such time that the well is located or becomes accessible.

For sites previously closed with a groundwater use restriction that was filed with the Register of Deeds as a condition of case closure under s. NR 726.05(2)(c), Wis. Adm. Code, the RP may apply for unconditional closure from the agency with administrative authority after groundwater concentrations fall below ch. NR 140 enforcement standards. The agency may issue a written determination that can be recorded at the Register of Deeds Office to give notice that the previously recorded groundwater use restriction is no longer required. Where groundwater concentrations fall between the ch. NR 140 PAL and ES, the RP may apply for an exemption under s. NR 140.28, Wis. Adm. Code. Again, when groundwater concentrations decrease below the ch. NR 140 PAL(s), the RP or property owner may request a written determination from the DNR that may be recorded at the Register of Deeds Office, stating that the PAL exemption is no longer needed.

5. VPLE SITES THAT CLOSE UNDER 2, 3, OR 4 ABOVE,

Properties that are in the Voluntary Party Liability Exemption process can also use the institutional controls described above as part of a remediation. Generally, the same requirements and limitations described in this guidance would apply to VPLE sites. Institutional controls that are used at a VPLE site are included in the Certificate of Completion as conditions that must be satisfied in order to qualify for the liability exemption.

In addition, VPLE sites that use natural attenuation and need to be included in the GIS Registry due to groundwater contamination above enforcement standards also need to obtain environmental insurance through a state insurance program as described in ch. NR 754, Wis. Adm. Code. The master insurance policy set up by the State of Wisconsin, funded through fees provided by the Voluntary Parties, ensures that financial responsibility is met for the long term protection of the site should the need arise if natural attenuation were to fail in the future.

APPENDIX 1: EXAMPLES OF APPLYING THIS GUIDANCE TO VARIOUS FACT SITUATIONS

1. UNRESTRICTED CASE CLOSURE.

EXAMPLE: All contamination on the property has been adequately investigated and remediated to the extent necessary to meet the requirements of chs. NR 700 to NR 724 (and NR 746, if it's applicable to a case that has petroleum contamination), including applicable NR 720 soil cleanup standards (table values or SSRCLs) if applicable, and NR 140 Wis. Adm. Code, groundwater quality standards.

The Department does not provide a closure review letter and no institutional control is required for the site. If a fee is submitted as required by ch. NR 749, a closure review letter stating that the site meets the requirements of ch. NR 746 for petroleum sites (when applicable) and/or ch. NR 726 is sent to the responsible party (RP). See Appendix 3 – Fees for Technical Review.

2. CLOSURE WITH THE REQUIREMENT TO LIST A SITE WITH SOIL CONTAMINATION ON THE GIS REGISTRY.

EXAMPLE 1: Chapter NR 746 does not apply. A post remediation soil boring at a depth of 5 feet in the source area reveals residual soil contamination at higher concentrations than ch. NR 720 Table 2 (direct contact) RCL's. SSRCLs for direct contact have not been calculated for the site. There is no exceedance of ch. NR 720 Table 1 levels (for groundwater protection). The RP's consultant argues in the case closure report that additional remedial action is not technically or economically feasible when evaluated as required by s. NR 722.07(4), Wis. Adm. Code. GIS Registry information is included in the case closure application package.

In this situation, the case may be closed if: (1) the site is listed on the GIS Registry, (2) the soil contamination has been adequately characterized, and (3) closure staff have adequate information to determine that there is no need for additional remediation to prevent direct contact or a threat to groundwater due to the residual contaminant concentrations remaining on the site.

In this example, deciding whether or not a deed notice or a deed restriction should be required is a discretionary decision to be made by the case closure committee or closure staff under the authority of s. NR 726.05 (8)(c), Wis. Adm. Code. This rule allows the agency with administrative authority to require a deed notice or a deed restriction if there are "site-specific circumstances that make a deed notice or deed restriction necessary to adequately protect human health or safety or the environment."

EXAMPLE 2: Chapter NR 746 does not apply. SSRCLs have been calculated for protection of groundwater under s. NR 720.19, Wis. Adm. Code, and post-remediation monitoring at a 3- foot depth shows there are no exceedances of these levels. However, there are exceedances of NR 720 Table 2 (direct contact) levels at the 3 foot depth. The RP's consultant argues in the case closure report that additional remedial action is not technically or economically feasible when evaluated as required by s. NR

722.07(4) Wis. Adm. Code. The information required for listing the site on the GIS Registry is submitted with the case closure request.

This case may be closed if: (1) the soil contamination has been adequately characterized, (2) closure staff have sufficient information to determine that there is no need for additional remediation to prevent a threat to groundwater due to the residual contaminant concentrations remaining on the site, (3) a deed restriction is signed and recorded as required by s. NR 726.05(8)(b) 4, Wis. Adm. Code, to ensure that the soil cover is maintained thus preventing the potential for a direct contact threat, and (4) the site is listed on the GIS Registry.

EXAMPLE 3: Chapter NR 746 does not apply. SSRCLs have been calculated for protection of groundwater under s. NR 720.09, Wis. Adm. Code, and post-remediation monitoring at a 3- foot depth shows there are exceedances of these SSRCLs. The area with residual soil contamination has been capped with a concrete parking lot. The RP's consultant argues in the case closure report that additional excavation or treatment of the residual soil contamination is not technically or economically feasible when evaluated as required by s. NR 722.07(4), Wis. Adm. Code. The information required for listing the site on the GIS Registry is submitted with the case closure request.

This case may be closed if: (1) the soil contamination has been adequately characterized, (2) closure staff have sufficient information to determine that the concrete cap, if maintained, will prevent a threat to groundwater due to the residual contaminant concentrations remaining on the site, (3) a deed restriction that requires maintenance of the concrete cap is signed and recorded as required by s. NR 726.05(8)(b) 3., Wis. Adm. Code, and (4) the site is listed on the GIS Registry.

EXAMPLE 4: The case qualifies for closure under ch. NR 746. A post remediation soil boring at a depth of 3 feet in the source area reveals residual PAH contamination in the soil. However, there is no exceedance of ch. NR 746 Table 1 or Table 2 concentrations. The RP's consultant argues in the case closure report that the residual PAH soil contamination does not pose any potential human health risk from direct contact, and that, under s. NR 746.06(2)(d), Wis. Adm. Code, the case is eligible for closure.

Petroleum cases that are eligible for closure under ch. NR 746, Wis. Adm. Code, are exempt from the requirements of ch. NR 722, Wis. Adm. Code regarding an evaluation of remedial options.

This case may be closed if: (1) the soil contamination has been adequately characterized, (2) closure staff have sufficient information to determine that the residual PAH contamination remaining on the site will not pose a human health risk from direct contact as long as a soil cap, a building foundation or pavement is maintained over the area with PAH contamination, and (3) a deed restriction that requires maintenance of the existing soil cap (unless it is replaced with a comparable barrier) is signed and recorded as required by s. NR 726.05(8)(b)4., Wis. Adm. Code.

3. CLOSURE WITH THE REQUIREMENT TO LIST A SITE WITH GROUNDWATER CONTAMINATION ON THE GIS REGISTRY.

EXAMPLE 1: Chapter NR 746 does not apply. A site has ch. NR 140 enforcement standard exceedances in groundwater, but no exceedances of ch. NR 720 soil cleanup standards. Natural attenuation has been demonstrated to be effective for the treatment of the contamination in groundwater. The plume is stable or receding.

If all of the requirements of s. NR 726.05, Wis. Adm. Code, are met, the case may be closed provided that the site is listed on the GIS Registry to provide public notification of groundwater contamination that exceeds ch. NR 140 enforcement standards.

EXAMPLE 2: Chapter NR 746 applies because this is a site where petroleum products have been discharged to groundwater from a petroleum storage tank system. A petroleum-contaminated site has ch. NR 140 enforcement standard exceedances in groundwater within low permeability material, and soil contamination exceeding ch. NR 746 Table 2 concentrations 6 feet below the ground surface.

If all of the requirements of ss. NR 746.06 and NR 746.07 or NR 746.08, Wis. Adm. Code, and all of the applicable requirements in s. NR 726.05, Wis. Adm. Code, are satisfied, the case may be closed under ch. NR 746 and applicable requirements of NR 726, provided that the site is listed on the GIS Registry to provide public notification of groundwater contamination that exceeds ch. NR 140 enforcement standards.

4. GIS REGISTRY LISTING WITH A DEED RESTRICTION THAT IS REQUIRED BY RULE

EXAMPLE 1: For all sites: A structural impediment exists which currently prevents access to undefined soil contamination that is likely to require remediation after the impediment is removed.

In this situation, the case may be closed if a deed restriction is signed and recorded, which requires the RP or property owner to investigate remaining soil contamination if the structural impediment is removed, and to remediate as necessary. The site is also required to be listed on the GIS Registry.

EXAMPLE 2: NR 746 does not apply. A performance standard is selected as a final remedy for a site where soil contamination that poses a direct contact threat exceeds ch. NR 720 SSRCLs or Table 2 RCL concentrations (where SSRCLs are not calculated).

When a remedy is engineered and constructed to meet a performance standard, such as the installation of an asphalt or concrete cap, a clay layer, or a soil cover, a deed restriction is required under s. NR 726.05(8)(b)4, Wis. Adm. Code, which specifies that maintenance and repair of the cap or cover must be conducted until the soil that exceeds ch. NR 720 soil cleanup standards is removed or remediated. A maintenance plan should be referenced in the deed restriction that specifies the frequency of inspection, etc. The site is also required to be listed on the GIS Registry to give notice of the soil contamination.

EXAMPLE 3: NR 746 does not apply. A site has residual soil contamination that exceeds non-industrial RCLs in ch. NR 720, Table 2, Wis. Adm. Code, but does not exceed industrial RCLs and does not have any groundwater contamination exceeding ch. NR 140 groundwater enforcement standards.

If all of the requirements of s. NR 726.05, Wis. Adm. Code, are satisfied, this case may be closed with a deed restriction that meets the requirements of s. NR 720.11 and s. NR 726.05 (8)(b) 1, Wis. Adm. Code, (and an NR 140.28 preventive action level (PAL) exemption if there is groundwater contamination that exceeds ch. NR 140 PALs). The deed restriction is required in order to ensure that the property's land use does not change to a non-industrial use in the absence of a cleanup that meets the non-industrial standards. The site is not required to be listed on the GIS Registry, since it satisfies the requirements of ch. NR 720 and does not have any groundwater contamination that exceeds ch. NR 140 groundwater enforcement standards.

5. DISCRETIONARY DECISIONS TO USE AN INSTITUTIONAL CONTROL AS A CONDITION OF CASE CLOSE BASED ON SITE CHARACTERISTICS AT THE TIME OF CLOSURE OR ANTICIPATED FUTURE CONDITIONS.

EXAMPLE 1: For all sites: Residual soil contamination remains on a site at a depth of more than 4 feet that either exceeds ch. NR 720, Table 2 concentrations or SSRCLs calculated in compliance with the requirements of s. NR 720.11, Wis. Adm. Code, (based on direct contact threat). However, the residual soil contamination does not exceed SSRCLs calculated under s. NR 720.09 (based on leaching to groundwater). The undisturbed soil cover prevents direct contact with the contaminants. Natural attenuation is the selected remedy for groundwater contamination that exceeds the NR 140 ES at the site.

Section NR 726.05(8)(b)4, Wis. Adm. Code, does not require a deed restriction if the soil contamination exceeding ch. NR 720, Table 2 concentrations or SSRCLs is more than 4 feet below the ground surface. However, a deed restriction may be required if the agency with administrative authority for the site determines that excavation or other development of the contaminated area is likely in the foreseeable future that may eliminate, in whole or in part, the overlying depth of uncontaminated soil. In this situation, a deed restriction may be required to ensure that an assessment of the degree and extent of contaminated soil that remains above ch. NR 720 soil cleanup standards will be conducted at the time that excavation or other construction on the site is proposed, and to require that appropriate measures be taken to prevent a direct contact hazard to workers. A deed notice may be required if the agency with administrative authority for the site determines that a deed notice is necessary to protect human health or safety or the environment because of site-specific circumstances (potentially requiring that appropriate measures be taken to prevent a direct contact hazard to workers, among other things).

The case may be closed if the site is listed on the GIS Registry. Listing on the GIS Registry is required because the residual soil contamination exceeds ch. NR 720 soil cleanup standards and the residual groundwater contamination exceeds ch. NR 140 groundwater enforcement standards.

Example 2: For all sites: A groundwater monitoring well that was used for site investigation and/or to monitor the effectiveness of remediation on the site has not been accounted for in the case closure request that is reviewed by the agency with administrative authority for the site. The RP's consultant has been unable to locate the monitoring well or is able to document that the monitoring well has been covered up with subsequent construction activities and was not properly abandoned.

A deed notice may be required as a condition of case closure when a monitoring well is lost or has not been properly abandoned because it is not accessible at the time that the case closure request is submitted. In this situation, the deed notice should state that if the well is found or made accessible in the future, the monitoring well must be abandoned according to the requirements of ch. NR 141, Wis. Adm. Code.

Appendix 2: Model Deed Documents, Directions and Checklists

- Deed Notice (Residual Soil Contamination, Monitoring Well Abandonment)
- Deed Notice (Terminate or Amend Previously Recorded Restrictions)
- Deed Restriction
- Sample Maintenance Plan and Inspection Log
- Drafting Deed Restrictions for Final Case Closure
- Deed Restriction Preparation Checklist
- Deed Restriction Submittal Checklist

Signature: _____
Printed Name: _____

Subscribed and sworn to before me
this _____ day of _____, 20__.

Notary Public, State of _____
My commission _____

This document was drafted by _____.

Document Number

DEED NOTICE

In Re: [Legal description of the property as it appears on
the most recent deed]

STATE OF WISCONSIN)
) ss
COUNTY OF _____) [County where
document is signed]

Recording Area

Name and Return Address

_____, being first duly sworn, on
oath deposes and says:

1. That he/she is the owner of the above-described
property.
[or he/she is an officer in the corporation that owns the
property, a partner in the partnership that owns the
property, or is an employee of the governmental entity that
owns the property and has been authorized by the governing body to sign and record
this notice]

2. That approval has been given by the Wisconsin Department of Natural Resources to
[terminate or amend] previously recorded land use restrictions for the above-described
property, as documented in the attached letter from the Department, labeled Exhibit A.

3. That this affidavit is being recorded for the purpose of notifying prospective
purchasers and other interested persons that **[there are no further restrictions on the
use of the above-described property due to the presence of residual
contamination or the land use restrictions that were previously required by the
Wisconsin Department of Natural Resources have been amended, as provided in
Exhibit A].**

Signature: _____

Printed Name: _____

Subscribed and sworn to before me
this _____ day of _____, 20__.

Notary Public, State of _____

My commission _____

This document was drafted by _____.

Document Number

DEED RESTRICTION

Declaration of Restrictions

In Re: **[Insert legal description of the property as it appears on the most recent deed]**

Recording Area

Name and Return Address

STATE OF WISCONSIN)
) ss
COUNTY OF _____) **[County where document is signed]**

WHEREAS, _____ is the owner of the above-described property.

Parcel Identification Number

WHEREAS, one or more **[type of contaminant(s)]** discharges have occurred on this property, and as of **[Insert sample collection date or dates]** when soil samples were collected on this property, **[Type of contaminant(s)]**-contaminated soil remained on this property at the following location: **[description of location or locations on the property where contamination was, or may have been, left in place; reference and attach a sketch or map]**

WHEREAS, it is the desire and intention of the property owner to impose on the property restrictions which will make it unnecessary to conduct further soil remediation activities on the property at the present time.

NOW THEREFORE, the owner hereby declares that all of the property described above is held and shall be held, conveyed or encumbered, leased, rented, used, occupied and improved subject to the following limitation and restrictions:

[OPTION 1, where structural impediments make a complete investigation or cleanup of soil contamination impracticable]:

Structural impediments existing at the time of cleanup, **[insert description of the impediments]**, made complete **[choose the correct wording: investigation and/or remediation]** of the soil contamination on this property impracticable. If the structural impediments on this property that are described above are removed, the property owner shall conduct an investigation of the degree and extent of **[type of contaminant]** contamination. To the extent that contamination is found at that time, the **[Wisconsin Department of Natural Resources or other agency with administrative authority]**

for the site] shall be immediately notified and the contamination shall be properly remediated in accordance with applicable statutes and rules. If currently inaccessible soil near or beneath the structural impediments on the property is excavated in the future, the soil must be sampled and analyzed, may be considered solid or hazardous waste if residual contamination remains and must be stored, treated and disposed in compliance with applicable statutes and rules.

[OPTION 2, where an industrial residual contaminant level in Table 2 in s. NR 720.11, Wis. Adm. Code, has been applied to soil remediation at the site or facility]

The most recent soil samples that were collected on this property, which were collected on **[Insert sample collection date or dates]**, contained **[Insert names of contaminants that exceeded NR 720.11, Table 2 soil standards]** in concentrations that exceeded NR 720.11, Table 2 Wis. Adm. Code, soil standards. Therefore, the property described above may not be used or developed for a residential, commercial, agricultural or other non-industrial use, unless (at the time that the non-industrial use is proposed) an investigation is conducted, to determine the degree and extent of [type of contaminant] contamination that remains on the property, and remedial action is taken as necessary to meet all applicable non-industrial soil cleanup standards. If soil that remains on the property in the location or locations described above where there is residual contamination is excavated in the future, the soil must be sampled and analyzed, may be considered solid or hazardous waste if residual contamination remains, and must be stored, treated and disposed in compliance with applicable statutes and rules.

[OPTION 3, where pavement, an engineered cap or another type of barrier, such as a building foundation or soil cover, is a selected remedial action to address residual soil contamination on the property. Depending on the facts of the case, use either Option A, Option B or Option C for Paragraph 1 and include Paragraph 2 in all cases where a cap or cover of some kind is required, regardless of which Paragraph 1 option is used.]

[Option A for Paragraph 1: Barrier to Prevent Direct Contact Only]

The **[pavement, building foundation and/or soil cover]** that existed on the above-described property in the location shown on the attached map, labeled Exhibit ____ **[Insert reference to attached exhibit]** on the date that this restriction was signed shall be maintained in compliance with the **[Insert title of the approved maintenance plan]** dated **[Insert date]** that was submitted to the **[Wisconsin Department of Natural Resources or other agency with administrative authority for the site]** by **[Insert name of the responsible party or responsible party's consultant]**, as required by section NR 724.13 (2), Wis. Adm. Code (October 1999). A copy of the maintenance plan can be found at **[insert location maintenance plan is to be kept]**. This **[pavement, building foundation and/or soil cover]** must be maintained in order to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health. If soil that remains on the property in the location or locations described above where there is residual contamination is excavated in the future, the soil must be sampled and analyzed, may be considered solid or hazardous waste if residual contamination remains and must be stored, treated and disposed in compliance with applicable statutes and rules.

[Option B for Paragraph 1: Impervious Barrier Required]

The pavement or other impervious cap that existed on the above-described property in the location shown on the attached map, labeled Exhibit __ **[Insert reference to attached exhibit]** on the date that this restriction was signed shall be maintained in compliance with the **[Insert title of the approved maintenance plan]** dated **[Insert date]** that was submitted to the **[Wisconsin Department of Natural Resources or other agency with administrative authority for the site]** by **[Insert name of the responsible party or the responsible party's consultant]**, as required by section NR 724.13 (2), Wis. Adm. Code (October 1999). A copy of the maintenance plan can be found at **[insert location maintenance plan is to be kept]**. This pavement or other impervious cap must be maintained in order to minimize the infiltration of water and prevent additional groundwater contamination that would violate the groundwater quality standards in ch. NR 140, Wis. Adm. Code, and to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health. If soil that remains on the property in the location or locations described above where there is residual contamination is excavated in the future, the soil must be sampled and analyzed, may be considered solid or hazardous waste if residual contamination remains and must be stored, treated and disposed in compliance with applicable statutes and rules.

[Option C for Paragraph 1: Engineered Cap Required]

The **[Insert description of required engineered cap]** that existed on the above-described property on the date that this restriction was signed forms a barrier that must be maintained in order to minimize the infiltration of water and prevent additional groundwater contamination that would violate the groundwater quality standards in ch. NR 140, Wis. Adm. Code, and to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health. The required cap shall be maintained on the above-described property in the locations shown on the attached map, labeled "**[Insert reference to attached exhibit]**" unless another barrier that **[option 1: reduces infiltration to the greatest extent practicable] [option 2: provides an infiltration rate equivalent to the landfill cap design requirements in s. NR 504.07, Wis. Adm. Code (March 2003)] [Note: options 1 and 2 may be combined]** is installed and maintained in its place. The existing cap, and any replacement barrier, shall be maintained on the above-described property in compliance with the "**[Insert title of the approved maintenance plan]**" dated **[Insert date]**, that was submitted to the **[Wisconsin Department of Natural Resources or other agency with administrative authority for the site]** by **[Insert name of the responsible parties]**, as required by section NR 724.13 (2), Wis. Adm. Code (October 1999). A copy of the maintenance plan can be found at **[insert location maintenance plan is to be kept]**. If soil that remains on the property in the location or locations described above where there is residual contamination is excavated in the future, the soil must be sampled and analyzed, may be considered solid or hazardous waste if residual contamination remains and must be stored, treated and disposed in compliance with applicable statutes and rules.

[Paragraph 2 for Option 3 situations:]

In addition, the following activities are prohibited on any portion of the above-described property where **[pavement, a building foundation, soil cover, engineered cap or another barrier]** is required, as shown on Exhibit __ **[reference attached exhibit]**, unless prior written approval has been obtained from the Wisconsin Department of

Natural Resources or its successor or assign: (1) Replacement with another barrier; (2) Excavating or grading of the land surface; (3) Filling on capped or paved areas; (4) Plowing for agricultural cultivation; and (5) Construction or placement of a building or other structure in an area where **[pavement, a building foundation, soil cover, engineered cap or another barrier]** is required.

This restriction is hereby declared to be a covenant running with the land and shall be fully binding upon all persons acquiring the above-described property whether by descent, devise, purchase or otherwise. This restriction inures to the benefit of and is enforceable by the Wisconsin Department of Natural Resources, its successors or assigns. The Department, its successors or assigns, may initiate proceedings at law or in equity against any person or persons who violate or are proposing to violate this covenant, to prevent the proposed violation or to recover damages for such violation.

Any person who is or becomes owner of the property described above may request that the Wisconsin Department of Natural Resources or its successor issue a determination that one or more of the restrictions set forth in this covenant is no longer required. Upon the receipt of such a request, the Wisconsin Department of Natural Resources shall determine whether or not the restrictions contained herein can be extinguished. If the Department determines that the restrictions can be extinguished, an affidavit, attached to a copy of the Department's written determination, may be recorded by the property owner or other interested party to give notice that this deed restriction, or portions of this deed restriction, are no longer binding.

[Optional Provision, only required if the property is owned by a corporation, partnership, cooperative or governmental entity] By signing this document, _____ asserts that he or she is duly authorized to sign this document on behalf of _____ **[the property owner's name]**.

IN WITNESS WHEREOF, the owner of the property has executed this Declaration of Restrictions, this _____ day of _____, 20____.

Signature: _____

Printed Name: _____

Subscribed and sworn to before me
this _____ day of _____, 20____.

Notary Public, State of _____
My commission _____

This document was drafted by _____ based on a model deed restriction provided by the Wisconsin Department of Natural Resources.

Example Maintenance Plan for a Simple Site

This maintenance plan example may be considered as an example template to begin developing an actual plan at simple sites that have only certain features. Sites that are more complex or contain different features should not use this example. Additional guidance on the content of Operation and Maintenance Plans can be found in “Guidance for Cover Systems as Soil Performance Standard Remedies”, PUBL-RR-709.

This example template can be used to begin developing an actual maintenance plan at a simple site that:

- Is closed with contaminated soil remaining that contains contaminants exceeding NR 720 RCLs and the soil presents a direct contact and/or migration to groundwater pathway threat;
- Uses a soil performance standard cover or barrier to address the direct contact and/or migration to groundwater pathway(s); and
- Uses a cover or barrier that is pavement and/or a building(s).
- can be closed with natural attenuation addressing the groundwater pathway where contaminated soil remains that can leach contaminants into groundwater. Often a cover or barrier is a necessary part of the overall remedial approach to assure natural attenuation continues successfully after closure, because it provides some level of infiltration reduction that should not be changed. These maintenance plans should be developed to assure that occurs after closure is granted.

PAVEMENT COVER AND BUILDING BARRIER MAINTENANCE PLAN

[DATE]

Property Located at:

[ACTIVITY ADDRESS]

[FID # (if known), WDNR BRRTS/Activity #]

[LEGAL DESCRIPTION] [TAX #]

Introduction

This document is the Maintenance Plan for a pavement cover and building barrier at the above-referenced property in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code. The maintenance activities relate to the existing [slab on grade] building and other paved surfaces occupying the area over the contaminated groundwater plume or soil on-site. The contaminated [groundwater plume] [or soil] is impacted by [enter list of contaminant(s)]. The location of the paved surfaces and building to be maintained in accordance with this Maintenance Plan, as well as the impacted [groundwater plume] [or soil] are identified in the attached map (Exhibit A).

Cover and Building Barrier Purpose

The paved surfaces and the building foundation over the contaminated [groundwater plume] [or soil] serve as a barrier to prevent direct human contact with residual soil contamination that might otherwise pose a threat to human health. [These paved surfaces and building foundation also act as a partial infiltration barrier to minimize future soil-to-groundwater contamination migration that would violate the groundwater standards in ch. NR 140, Wisconsin Administrative Code.] Based on the current and future use of the property, the barrier should function as intended unless disturbed.

Annual Inspection

The paved surfaces and building foundation overlying the [contaminated groundwater plume] [or soil] and as depicted in Exhibit A will be inspected once a year, normally in the spring after all snow and ice is gone, for deterioration, cracks and other potential problems that can cause [additional infiltration into] [or exposure to] underlying soils. The inspections will be performed to evaluate damage due to settling, exposure to the weather, wear from traffic, increasing age and other factors. Any area where soils have become or are likely to become exposed will be documented. A log of the inspections and any repairs will be maintained by the property owner and is included as Exhibit B, Cap Inspection Log. The log will include recommendations for necessary repair of any areas where underlying soils are exposed. Once repairs are completed, they will be documented in the inspection log. A copy of the inspection log will be sent to the Wisconsin Department of Natural Resources ("WDNR") at least annually after every inspection, unless otherwise directed in the case closure letter.

Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. Repairs can include patching and filling operations or they can include larger resurfacing or construction operations. In the event that necessary maintenance activities expose the underlying soil, the owner must inform maintenance workers of the direct contact exposure hazard and provide them with appropriate personal protection equipment ("PPE"). The owner must also sample any soil that is excavated from the site prior to disposal to ascertain if contamination remains. The soil must be treated, stored and disposed of by the owner in accordance with applicable local, state and federal law.

In the event the paved surfaces and/or the building overlying the [contaminated groundwater plume] [or soil] are removed or replaced, the replacement barrier must be equally impervious. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless indicated otherwise by the WDNR or its successor.

The property owner, in order to maintain the integrity of the paved surfaces and/or the building, will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

Amendment or Withdrawal of Maintenance Plan

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

Contact Information [MONTH & YEAR]

Site Owner and Operator: [NAME]
[ADDRESS]
[PHONE #]

Consultant: [NAME]
[ADDRESS]
[PHONE #]

WDNR: [PROJECT MANAGER NAME]
[ADDRESS]
[PHONE #]

Exhibit B
Barrier INSPECTION LOG

Inspection Date	Inspector	Condition of Cap	Recommendations	Have Recommendations from previous inspection been implemented?

Drafting Deed Restrictions for Final Case Closure

(1) Identify the specific restriction(s) required as conditions for closure and the reason for the restriction(s). (See PUB-RR-606, *Guidance on Case Closure and the Requirements for Institutional Controls and VPLE Environmental Insurance*, if there is any question as to whether or not the restrictions that have been required are appropriate for the fact situation.)

- inspection, maintenance and repair of pavement, a building foundation, a soil cap or other barrier to prevent direct contact?
- inspection, maintenance and repair of pavement, a building foundation, impervious cap or other barrier to minimize the infiltration of precipitation?
- non-industrial use prohibited until non-industrial standards are met?
- additional investigation or cleanup required when structural impediments are removed?
- maintenance and repair of a containment structure?
- other restrictions?

(2) Include the appropriate language for the required restriction. Include all of the standard “boiler plate” language in Options 1, 2 and/or 3 in the attached model deed restriction, as applicable.

- It is important to use the standard language in Options 1, 2 and 3 in the model deed restriction and to select the correct optional language to fit the facts of the case. Do not change the language from the model deed restriction.
- Specify whether the condition for closure requires the maintenance of existing pavement to prevent direct contact. If so, do not use the impervious cap option (to minimize infiltration) unless it is also a condition for closure.
- If an impervious cap or other barrier is required to minimize infiltration of precipitation at the site, it is not necessary to specify an infiltration rate of 10^{-7} cm/sec or less for a replacement barrier. What is needed is a requirement to maintain the impervious cap or other barrier that has been approved as part of the case closure decision and require, if the existing barrier is disturbed, that it be replaced with a barrier that is equivalent to what was originally approved at closure. In some instances, that replacement cap or barrier should have a technical specification in the restriction, depending on what was approved at closure. Therefore, recommended optional technical language is provided in the model deed restriction. Paragraph 2 for Option 3 situations in the model requires DNR approval of the replacement of an existing barrier. Acceptable cover or barrier designs for significant infiltration reduction are outlined in the guidance document “Guidance for Cover Systems as Soil Performance Standard Remedies,” Pub-RR-709. That guidance should be used to determine the type of cover required at closure as well as determining what optional technical language to include in the deed restriction for the replacement barrier or cap. Please be sure to delete any reference to an infiltration rate of 10^{-7} cm/sec or less (instead of 10^{-7} cm/sec or less), which appeared in some early electronic copies of the Department’s model deed restriction!
- Include the provision that requires compliance with all applicable statutes and rules if soil with residual contamination is excavated.

(3) Make sure the property owners' names, the legal description of the property and Parcel Identification Number (PIN) exactly match the names, legal description and PIN on the most recent deed.

- For example, if Mary M. Smith is on the original deed, it may not be changed to Mary Smith on the deed restriction.
- The legal description must read exactly the same as the legal description on the most recent deed. If a metes and bounds description has been retyped onto the deed restriction, it should be proofread. Typing mistakes are common. For lengthy metes and bounds descriptions, it is preferable for the drafter to attach a photocopy of the legal description from the most recent deed (not the entire deed!) and to insert "See attached legal description in Exhibit ____" at the top of page one of the deed restriction.
- It is o.k. for the drafter to include the street address of the property in addition to the legal description for the site, but the street address cannot be used instead of the legal description from the most recent deed.
- Legal descriptions may refer to a recorded plat map or certified survey map (CSM). Do not submit a copy of the plat map or CSM for recording. Plat maps and CSMs are already recorded at the county Register of Deeds Office. *(However, you do need to submit a copy of the CSM or the relevant portion of the recorded plat map (referred to in the legal description) to the DNR with the GIS Registry packet.)*
- The legal description on the deed restriction must include all of the property described in the most recent deed or the most recently recorded certified survey map (CSM), so that the deed restriction is properly indexed at the Register of Deeds Office. However, the restriction imposed by a deed restriction may only need to apply to a portion of the property. If that is the case, the portion of the property that is restricted should be described in the Now Therefore clause (either in a narrative or by using a map or diagram).
- If the most recent deed conveys the property to more than one person, such as a husband and wife, make sure that the correct names of all property owners are included in the first Whereas clause and that there is a signature block for each owner, since each owner must sign the deed restriction.
- If a corporation, partnership or agricultural cooperative owns the property, make sure that the corporation, partnership or cooperative's name as shown on the draft deed restriction is the same as on the most recent deed. The names of corporations, partnerships and cooperatives may change, and the name that is commonly used for a business may not be the official name that appears on the most recent deed to the property. If a corporation's name on the most recent deed and the corporation's name on the draft deed restriction do not match, and you have some doubt as to what the current, official name of a corporation is, check the corporation services section, under Quick Links, on the Wisconsin Department of Financial Institution's web site, www.wdfi.org, before contacting the responsible party to ask for clarification. Land and other assets can sometimes be transferred by means other than the signing of a deed. If you are told that the property in question has been transferred from one corporation to another in a merger or some other corporate reorganization, you will need to obtain and submit written documentation of that transfer for DNR files, if the most recent deed has the

name of the original corporate owner, rather than the current corporate owner.

- If the property is owned by a corporation, partnership or cooperative, include a statement near the end of the draft restriction that the person who is signing the restriction is authorized to sign on behalf of the property owner.
- In land contract situations, where the buyer is in possession of the property and is in the process of paying for the property under a land contract, but has not yet received a deed from the seller, both the buyer and the seller should sign the deed restriction. Amend the first Whereas clause to read: "Whereas, _____ [buyer] has purchased the above-described property under a land contract, and _____ [seller] retains title to the above-described property as security for payment of the remainder of the purchase price."

(4) Make sure the draft deed restriction clearly describes the type of contamination that remains and its location on the property.

- Attach a map or diagram to describe the location of the residual contamination. Make sure that such an attachment will be legible when photocopied or reproduced on microfiche. If there is a lot of data in small print on the exhibit, a copy will probably not be readable, and should be replaced with a less cluttered diagram or map.
- Do not attach charts with all of the sampling results of the latest round of sampling to the deed restriction. All that is needed is a list of the substances that exceeded applicable standards, or a general description of the type of substances that exceed applicable standards if the list of individual compounds is a long one.

(5) Make sure the document's format satisfies the requirements of s. 59.43 (2m), Wis. Stats. (the "Standard Format Requirements for Recorded Documents"). The Register of Deeds will reject documents that are not in compliance with these statutory requirements, and refuse to record them unless they are attached to a cover sheet that meets these requirements.

- The name of the document is located not less than 0.5 inch nor more than 3 inches from the top of the document.
- A horizontal area within 3 inches of the top of the document in the upper left hand corner, not less than 0.5 inch by 2 inches, is left blank for the unique document number.
- An area in the upper right corner of the document, at least 3 inches by 3 inches, is left blank for recording information (volume and page and date).
- A horizontal area for the return address, at least one inch by 3 inches, is included in the document.
- A space and line are provided for the parcel identification number (used by some counties, but not all).
- The margins on the bottom and sides of the document are at least 0.25 inch.
- The paper must be 8.5 inches wide and either 11 inches or 14 inches long.

(6) Include a statement at the end of the document that indicates who drafted it. This statement is required by s. 59.43 (5), Wis. Stats., which provides: "No instrument by which the title of real estate, or any interest therein or lien thereon, is conveyed, created, encumbered, assigned or otherwise disposed of shall be recorded by the

register of deeds unless the name of the person who, or governmental agency which, drafted such instrument is printed, typewritten, stamped or written thereon in legible manner.”

- If a DNR staff person drafts a deed restriction, it should state that the document was drafted by “the Wisconsin Department of Natural Resources.” It is not necessary to include the name of the DNR employee who did the actual drafting.
- If the deed restriction is drafted by someone outside of DNR, it is acceptable for the drafter to use the following wording: “This document was drafted by _____ [consultant or law firms’ name] based on a model deed restriction and comments received from the Wisconsin Department of Natural Resources.”
- It is **not** acceptable for the drafter to insert “This document was drafted by the Wisconsin Department of Natural Resources.” unless you are confident that DNR staff have personally verified all of the factual allegations made in the deed restriction.

(7) Include all of the standard “boiler plate” language on how the deed restriction may be enforced and may be amended or terminated (the last two paragraphs of the model deed restriction). Include the enforcement and termination paragraphs.

(8) If a pavement, building foundation or cap maintenance plan is required, make sure an adequate plan has been submitted. Reference the plan by title and correct date in the deed restriction, and identify where the maintenance plan can be found.

- If the deed restriction requires the maintenance of pavement, a building foundation, a soil cap or other barrier, submit a maintenance plan to the DNR for approval. The actions required in the maintenance plan may be summarized in the deed restriction.
- Make sure that the maintenance plan is adequate considering the complexity of the site, and detailed enough to be enforceable. See guidance document RR-709 and material in Appendix 2 for more information on what these plans should contain.

Deed Restriction Preparation Checklist

Identify the restrictions required in the conditions for closure.

- ☐ barrier to prevent direct contact?
- ☐ barrier to minimize the infiltration of precipitation?
- ☐ non-industrial use prohibited?
- ☐ additional investigation or cleanup required when structural impediments are removed?
- ☐ containment structure?
- ☐ other restrictions?

Include appropriate language for all of the required restrictions.

☐ Include all applicable standard “boiler plate” language in Options 1, 2 or 3 of the model deed restriction.

☐ Include the provision that requires compliance with all applicable state and federal laws if soil with residual contamination is excavated.

☐ Check to make sure the property owners’ names and the legal description of the property exactly match the names and legal description on the most recent deed.

☐ If the property has been sold by land contract and the buyer does not yet have a deed, include signature blocks for both the buyer and the seller to sign.

☐ Include in the draft deed restriction a clear description of the type of contamination that remains and its location on the property. Make sure all exhibits are included and will be legible when copied.

☐ Make sure that the document’s format satisfies the requirements of s. 59.43 (2m), Wis. Stats.

☐ Include a statement at the end of the document that indicates who drafted it.

☐ Include all of the standard “boiler plate” language on how the deed restriction may be enforced and amended or terminated (the last two paragraphs of the model deed restriction).

☐ If a pavement or cap maintenance plan is required, submit an adequate plan to the DNR. Make sure the maintenance plan is referenced accurately in the deed restriction (including the title and correct date for the plan and where the maintenance plan can be found).

Deed Restriction Submittal Checklist

A draft deed restriction submittal is not considered complete until all of the following have been submitted, where applicable:

- (1) A draft deed restriction that meets the following minimum requirements:
 - (a) The property owners' names and the legal description match the owners' names and legal description on the most recent deed.
 - (b) The type of contamination that remains on the property and its location are adequately described.
 - (c) The format of the draft document satisfies the requirements of s. 59.43 (2m), Wis. Stats.
 - (d) There is a statement at the end of the document that indicates who drafted it, as required by s. 59.43 (5), Wis. Stats.
- (2) A copy of the most recent deed for the property (unless there is another more recent legal document that includes the legal description and confirms the transfer of title, such as a certificate or judgment issued by a probate court after a property owner has died).
- (3) If the property has been sold under a land contract and the buyer has not yet received a deed, the buyer must be identified, as well as the seller who still holds record title to the property. (Both the buyer – the new owner – and seller – who holds a security interest in the property – should sign the deed restriction.)
- (3) A copy of any exhibits that are referred to in the draft deed restriction, that describe the location of residual contamination and/or to define the area within the property where restrictions apply.
- (4) A copy of the proposed pavement maintenance plan, or cap or barrier maintenance plan, if case closure was granted on the condition that pavement, or a cap or other barrier, is to be maintained and repaired until residual contamination meets current cleanup standards.

APPENDIX 3: Fees Associated With Case Closure and Amendment of Deed Instruments or Amendment of the GIS Registry. (Ch. NR 749, Wis. Adm. Code, Table 1)

FEE SCHEDULE

Type of Letter or Assistance	Statutory Citation	Fee
Tax Cancellation Agreement	s. 75.105(2)(d)	500
Negotiated Schedule	s. 292.11(7)(d)2	1000
Off-site Letters	s. 292.13(3)	500
Lender Assessments	s. 292.21(1)(c)1.d	500
Negotiation/Cost Recovery	s. 292.35(13)	(*)
General Liability Clarification Letters	s.292.55	500
Lease Letters - Single Properties	s. 292.55	500
Lease Letters - Multiple Properties	s. 292.55	1000
Case Close-out Actions	s. 292.55	750
Site Investigation Work Plan	s. 292.55	500
Site Investigation Report	s. 292.55	750
NR 720.19 Reports	s. 292.55	750
Remedial Action Options Report	s. 292.55	750
Remedial Design Reports	s. 292.55	750
O&M Reports	s. 292.55	300
Construction Documentation Rept.	s. 292.55	250
Long-term Monitoring Plans	s. 292.55	300
No Further Action Letters	s. 292.55	250
Other Technical Assistance	s. 292.55	500

(*) Local Governmental Units in the Negotiation/Cost Recovery Process set forth in s. 292.35, Stats., shall pay fees for each service requested.

Note: The Department will not review Phase I or Phase II Environmental Assessments, unless they are part of the Prospective Purchaser/Voluntary Party process as set forth in s. 292.15, Stats., or as part of a lender requesting this review in accordance with s. 292.21(1)(c)1.d., Stats.

FOR MORE INFORMATION

To view and/or download this and any other publication, or to find out more information about the Remediation and Redevelopment Program, please check out our web site at **www.dnr.state.wi.us/org/aw/rr**.

This document may contain some information about certain state statutes and rules but does not necessarily include all of the details found in the statutes/rules. Readers should consult the actual language of the statutes/rules to answer specific questions. Administrative rules may be found at:

www.legis.state.wi.us/rsb/code.

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